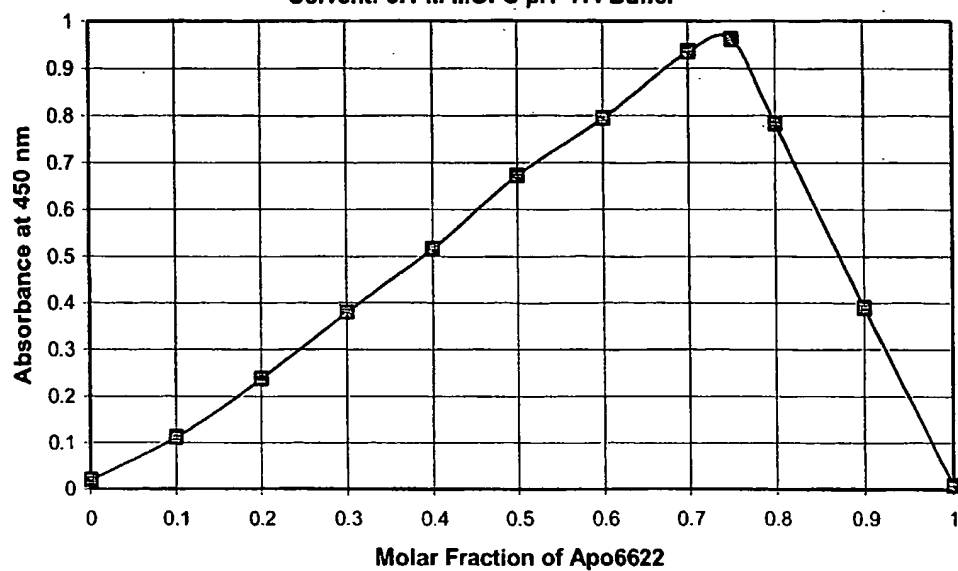


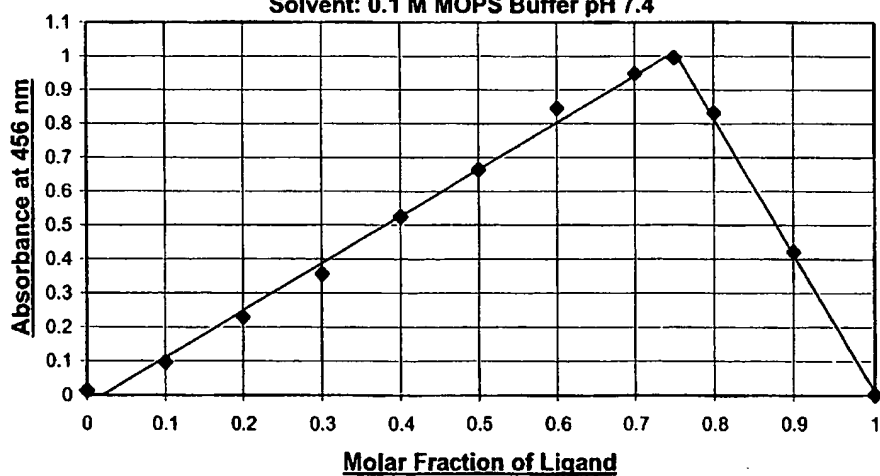
1/6

Figure 1: Job's Plot for Apo6622
 $[\text{Fe}^{3+}]_{\text{total}} + [\text{Apo6622}]_{\text{total}} = \text{Constant} = 8 \times 10^{-4} \text{ M}$
Solvent: 0.1 M MOPS pH=7.4 Buffer



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Figure 2: Job's Plot for Apo6617
 $[\text{Fe}^{3+}]_{\text{total}} + [\text{Apo6617}]_{\text{total}} = 8 \times 10^{-4} \text{ M}$
Solvent: 0.1 M MOPS Buffer pH 7.4



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Figure 3: Job's Plot for Apo6619
 $[\text{Fe}^{3+}]_{\text{total}} + [\text{Apo6619}]_{\text{total}} = 8 \times 10^{-4}$
Solvent: 0.1 M MOPS Buffer pH 7.4

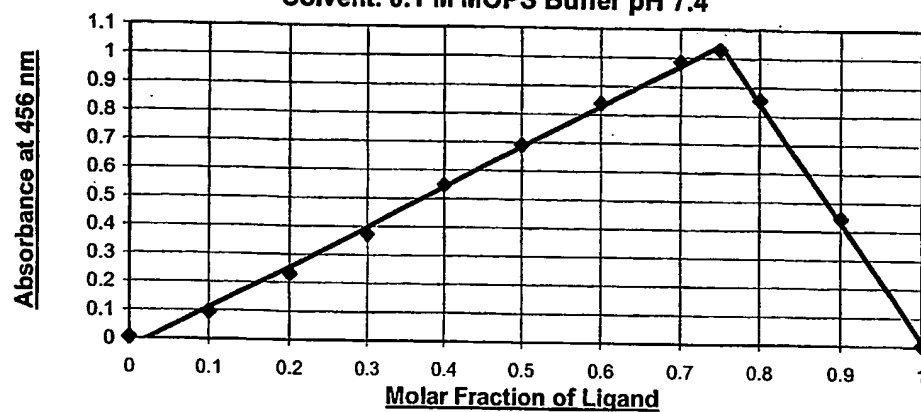
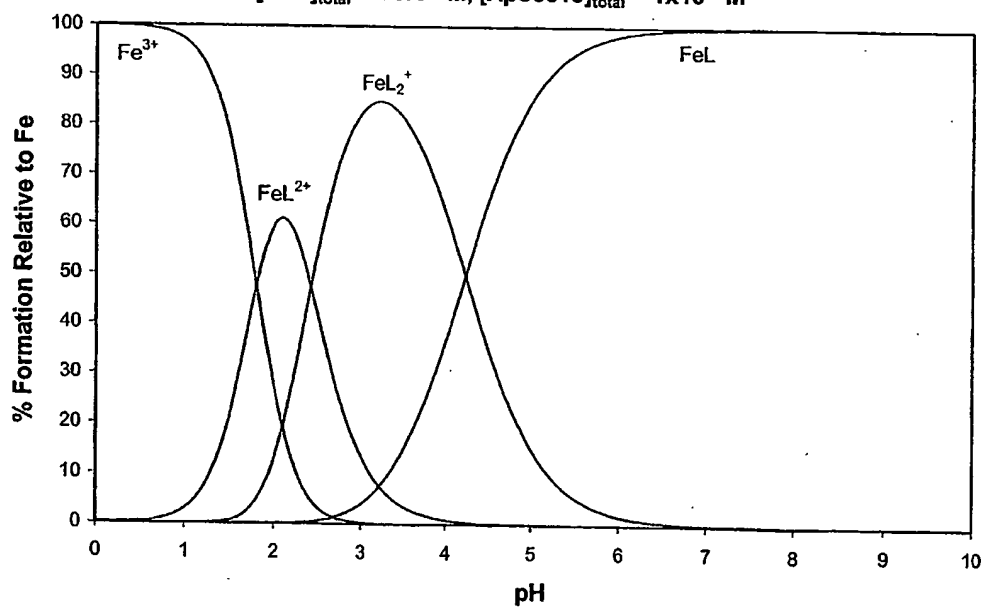
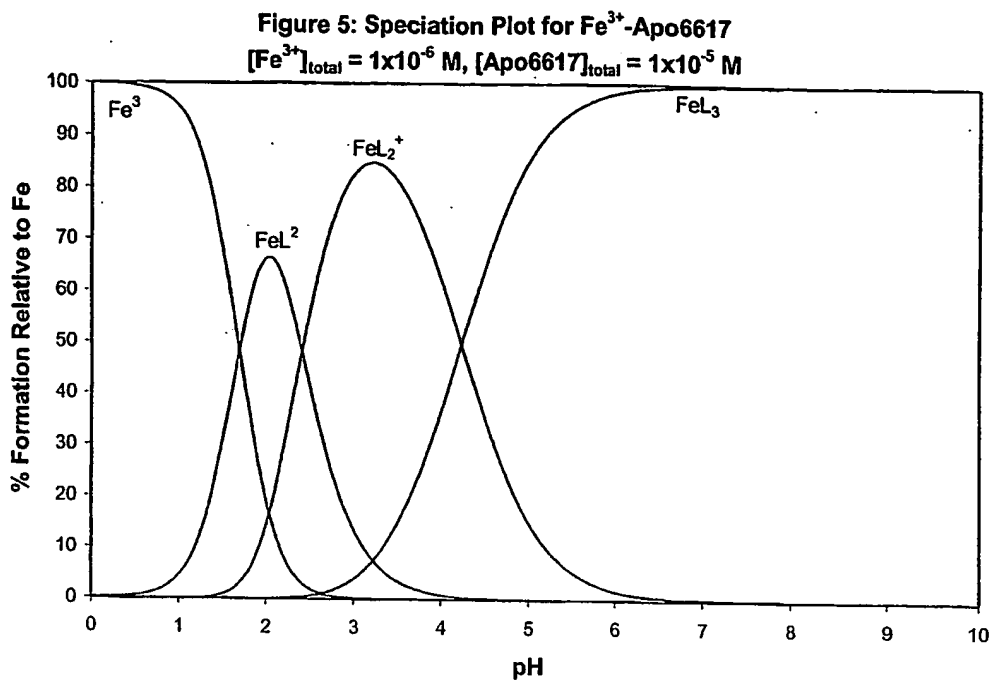


Figure 4: Speciation Plot for Fe^{3+} -Apo6619
 $[\text{Fe}^{3+}]_{\text{total}} = 1 \times 10^{-6} \text{ M}$, $[\text{Apo6619}]_{\text{total}} = 1 \times 10^{-5} \text{ M}$



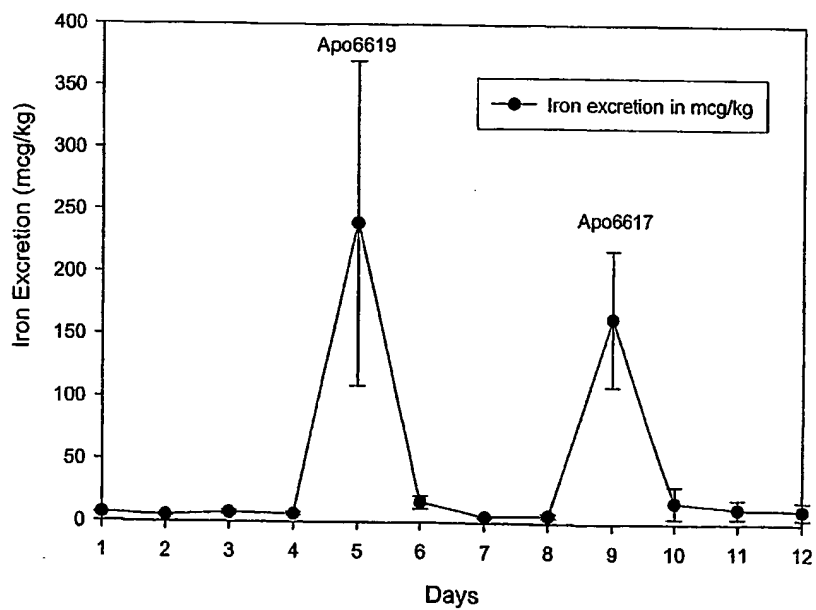
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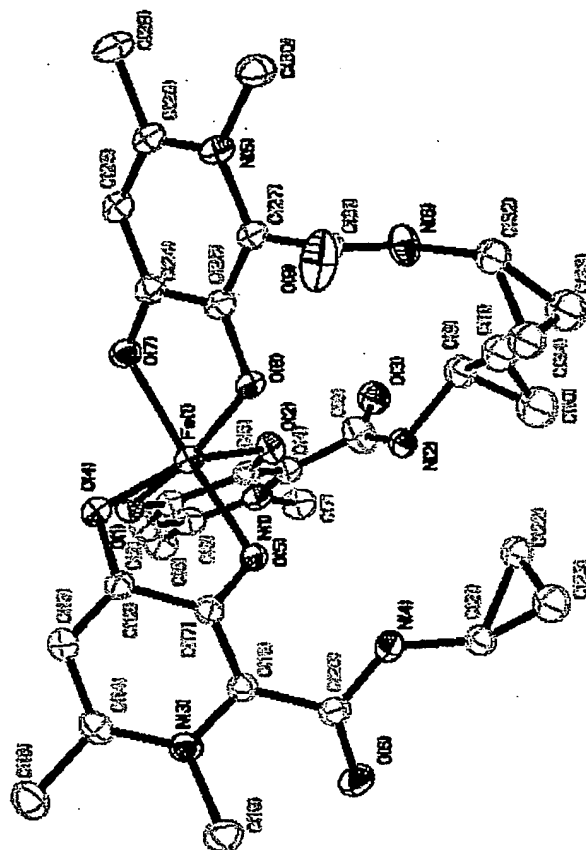
Figure 6

Effectiveness of Apo6619 and Apo6617 in Promoting Urinary Iron Excretion



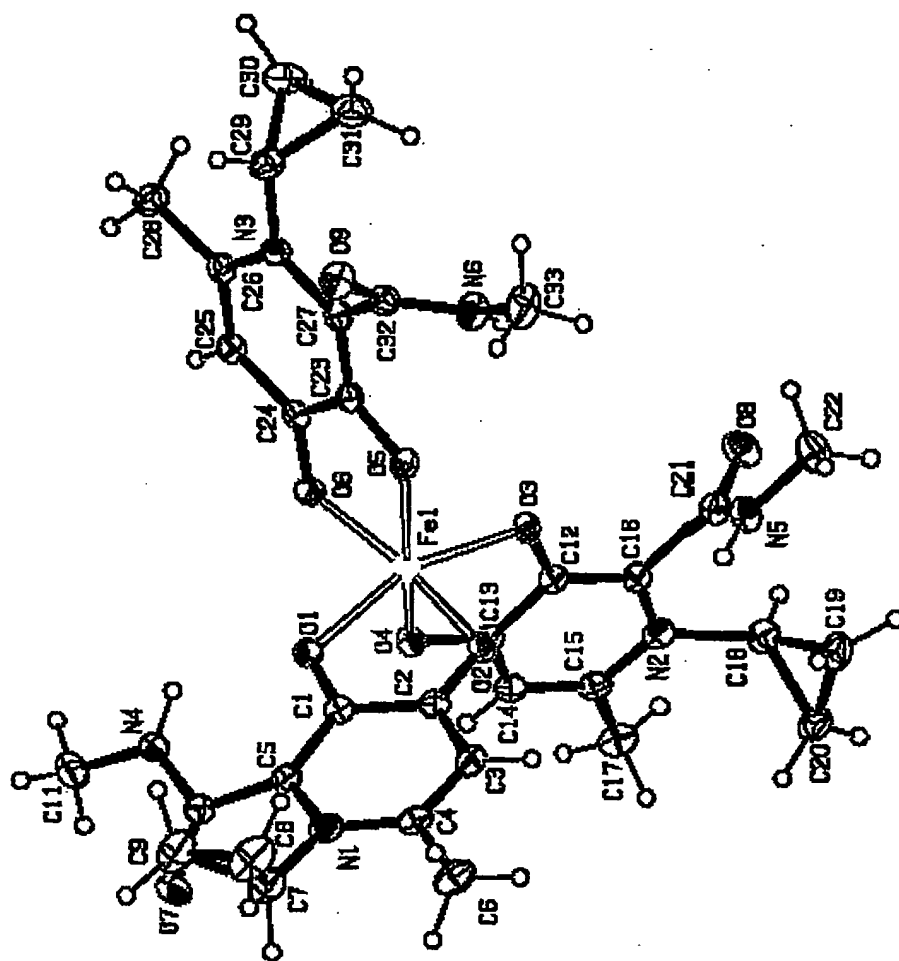
5 Figure 7

The crystal structure of Fe(Apo6617)₃.



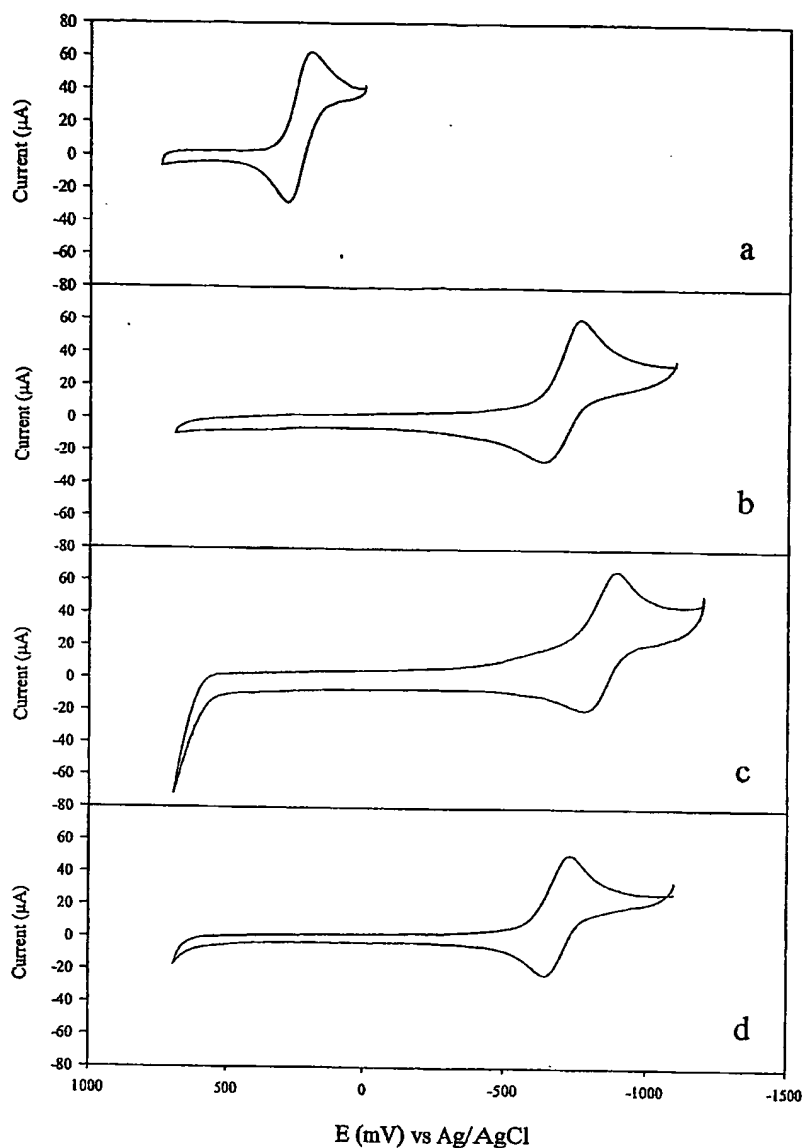
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FIG. 8 Single Crystal Structure of Fe(Apo6619)₃ chelate



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FIG. 9 Cyclic voltammogram of a. $K_3Fe(CN)_6$; b. $Fe(DFO)$; c. $Fe(deferiprone)$; d. $Fe(Apo6619)_3$ at pH 7.4. $K_3Fe(CN)_6$ is used as a standard to validate the results.

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